

PATENT SPECIFICATION

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DRAWINGS ATTACHED

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(54) A CONVERTIBLE BUILDING

- (71) I, ANTOINE FAURE a French citizen of Villa "Vent d'Est" Boulevard de la Garoupe, Antibes (Alpes-Maritimes) France, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—
- The present invention concerns a prefabricated building for habitation and for industrial use which can be mounted on wheels and is adapted to be converted into a different form.
- The building is convertible in that, according to requirements, its size can be readily doubled or even quadrupled.
- According to the present invention a prefabricated building comprises at least one extendible unit, the unit including a bottom panel forming a floor, a top panel forming a roof, two end panels and a first side panel, said panels being secured rigidly together, a second side panel hinged at its upper edge and pivotable about a horizontal axis between a first position in which the second side panel forms a side wall for the unit and a second position in which the second side panel forms an extension of the top panel, a support panel hanged to the edge of each end panel remote from the first side panel and pivotable through substantially 180° between a first position in which the support panels lie in face to face abutment with the associated end panels and a second position in which the support panels form extensions of the end panels to support the second side panel when the latter is in its second position, each support panel having a notch in an upper corner thereof remote from said edge of the end panel, and a gutter insertable in the notches when the support panels and second side panel are in their respective second positions, the second side panel having a turned down edge which is received in the gutter.
- Preferably a supplementary bottom panel is normally supported on the first mentioned bottom panel, and movable to provide a floor for the second side panel and the support panels when the latter are in their second positions.
- Furthermore, a supplementary side panel can be provided to close the side of the unit when the second side panel is in its second position.
- Moving the second side panel and the support panels into their second positions effectively doubles the floor area of the unit. By arranging two such units together, the gutter being common to both, the floor area is effectively quadrupled.
- The panels can include any apertures for fitting doors and/or windows.
- The schematic drawing attached hereto shows, by way of example only an embodiment of the invention.
- Fig. 1 is a perspective view of the unit in the position of a building with a single area; Fig. 2 is a cross section; Fig. 3 is a perspective view corresponding to that in Fig. 1 but in the double position of the building, the fourth side being open; Fig. 4 is a cross section of the arrangement of Fig. 3 with the fourth side closed; Fig. 5 is a cross section of two similar units attached to one another and providing a building having an area four times that of the original;
- Figs. 6 and 7 show the detail, on a larger scale of the articulated mounting of the movable front panel transformable into a roof element, in the folded and extended positions respectively.
- The building is composed essentially of a unit having a side panel 1, two end panels 2, a top 3 forming the roof and a base 4 forming the floor or covered with a floor surface 4a.
- The units rests on the ground on thick planks 5 or wheels and all its members are rigidly connected together.
- A second side panel 6 normally forming the front is pivotally connected at 7 to one edge of the top 3 or to a cross beam connecting

the two end panels 2. Furthermore, a support 9 is articulated on the edge of each of the two end panels 2 around a vertical axis 8, and its area and profile correspond approximately to those of the said panels 2 with, however, provision in the upper corner of the side opposite to the axis 8 of a notched part 10.

In the position of the building having the smallest area shown in Fig. 1, the panel 6 is disposed vertically and closes the fourth side of the building, the two supports 9 resting respectively against the corresponding end panels 2 to which they are connected (Figs. 1 and 2).

In order to double the area of the building it is sufficient to raise the panel 6 by pivoting it around its articulation 7 and to pivot the two supports 9 through 180° to bring them respectively into the extension of the end panels 2. In this position the upper edge of the said supports 9 serve to support the panel 6 which is thus transformed into a roofing member (see Fig. 3).

This enlargement of the area of the building is then completed by a movable floor 12 which can be located in the initial building and resting on the fixed floor surface 4a.

If the fourth side of this building is to be closed it is sufficient to fit, a supplementary front panel 13 (see Fig. 4).

Finally if it is desired to increase the area of the building further, and thus to quadruple it in respect to the original building, it is sufficient to attach two similar constructions to one another in the developed position shown in Figs. 3 and 4 and to cause a gutter 14 to rest in the notched parts 10 of the supports 9, in which gutter the turned down edge of both pivotable roofing elements 6 are located (see Fig. 5). The gutter 14 serves to collect and drain water.

Some or all of the panels 1, 2 or 13 and the supports 9 may include apertures 15 to receive door or window frames.

Figures 6 and 7 show one of the possible methods of providing, on the fixed top 3, the articulation 7 for the panel 6. According to this embodiment each end panel 2 includes an angle piece 16, and a U-shaped member 17 is attached to the end of the two pieces 16. A cut tube 18 is welded on to the U-shaped member 17 wherein the end of the sheet of metal forming the panel 6 can turn with clearance.

The articulated assembly just described is

disposed beneath a hood 19 formed by an extension of the fixed top 3.

WHAT I CLAIM IS:—

1. A prefabricated building comprising at least one extendible unit, the unit including a bottom panel forming a floor, a top panel forming a roof, two end panels and a first side panel, said panels being secured rigidly together, a second side panel hinged at its upper edge and pivotable about a horizontal axis between a first position in which the second side panel forms a side wall for the unit and a second position in which the second side panel forms an extension of the top panel, a support panel hinged to the edge of each end panel remote from the first side panel and pivotable through substantially 180° between a first position in which the support panels lie in face to face abutment with the associated end panels and a second position in which the support panels form extensions of the end panels to support the second side panel when the latter is in its second position, each support panel having a notch in an upper corner thereof remote from said edge of the end panel, and a gutter insertable in the notches when the support panels and second side panel are in their respective second positions, the second side panel having a turned down edge which is received in the gutter.

2. A prefabricated building as claimed in claim 1 including a supplementary bottom panel, normally supported on the first mentioned bottom panel, and movable to provide a floor for the second side panel and the support panels when the latter are in their second positions.

3. A prefabricated building as claimed in claim 1 or 2 including a supplementary side panel to close the side of the unit when the second side panel is in its second position.

4. A prefabricated building as claimed in claim 1, 2 or 3 in which two such units are arranged together with the gutter being common to both units.

5. A prefabricated building substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.

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